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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
07/402,450	09/01/1989	GEORGE J. MURAKAWA	2124-154	8131

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ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER	
CHUNDURU, SURYAPRABHA	
ART UNIT	PAPER NUMBER
1637	

NOTIFICATION DATE	DELIVERY MODE
07/13/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

UNITED STATES PATENT AND TRADEMARK OFFICE

———————

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

———————

Ex parte GEORGE J. MURAKAWA, R. BRUCE WALLACE,
JOHN A. ZAIA and JOHN J. ROSSI

———————

Appeal 2010-012299
Application 07/402,450
Technology Center 1600

———————

Before SALLY G. LANE, ERIC GRIMES, and STEPHEN WALSH,
Administrative Patent Judges.

GRIMES, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a method of viral RNA amplification. The Examiner has rejected the claims as unpatentable under 35 U.S.C. § 135(b)(1). We have jurisdiction under 35 U.S.C. § 6(b). We reverse and enter two new grounds of rejection.

STATEMENT OF THE CASE

The Specification discloses a viral RNA amplification method in which, "[f]or identification and quantification purposes it is preferred to

amplify the viral RNA sample . . . simultaneously with at least one other RNA sequence to provide a positive control and reduce the risk of false negative data" (Spec. 4: 1-5).

Claims 190-225, 242-245, and 249-255 are on appeal. Claim 190 is representative and reads as follows:

190: A process for amplification of a target viral RNA and a reference RNA in a sample which comprises:

(i) selecting a sequence present in the target viral RNA;

(ii) adding a known quantity of a reference RNA sequence to the sample, wherein the reference RNA sequence comprises a sequence present in the selected target viral RNA sequence and a sequence not present in the selected target viral RNA sequence, wherein the reference RNA sequence and the selected target viral RNA sequence can be amplified by the same or different oligonucleotides and wherein following amplification amplified reference RNA sequence and amplified selected target viral RNA sequence are distinguishable by size or by probes;

(iii) simultaneously subjecting the selected target viral RNA sequence and the reference RNA sequence in the sample to polymerase chain reaction amplification under conditions appropriate to simultaneously amplify the selected target viral RNA sequence if present in the sample and the reference RNA sequence; and

(iv) measuring the amounts of the amplified selected target viral RNA sequence and the amplified reference RNA sequence.

The claims stand rejected as follows:

• Claims 190-192, 194, 195, 197, 199-201, 203, 204, 206, 208-210, 212, 213, 215, 217-219, 221, 222, 224, 242-245, and 249-255 under 35 U.S.C. § 135(b)(1) based on Wang[1] (Answer 3[2]) and

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[1] Wang et al., US 5,219,727, issued June 15, 1993.

[2] Although the Examiner's statement of the rejections did not include some of the claims on appeal, the Examiner indicated that all of the claims were rejected (Office Action mailed Dec. 23, 2008, page 1) and Appellants

• Claims 193, 196, 198, 202, 205, 207, 211, 214, 216, 220, 223, and 225 under 35 U.S.C. § 135(b)(1) based on Wang and Mullis[3] (Answer 7).

I.

The Examiner has rejected all of the claims on appeal under 35 U.S.C. § 135(b)(1), on the basis that they are the same or substantially the same as the claims of Wang, or Wang combined with Mullis, but were not presented within one year of the date Wang issued as a patent (Answer 3, 7).

Appellants argue, with respect to some of the independent claims on appeal, that "they are not claiming the same or substantially the same subject matter as Wang et al. because . . . the claimed subject matter does not require the use of a shared primer pair" (Appeal Br. 23).

We agree with Appellants that the Examiner's rejection is precluded by the holding of Interference 105,055 (see Memorandum Opinion and Order ("Opinion"), Nov. 5, 2003, included in the Related Proceedings Appendix to the Appeal Brief). That interference involved the instant application and the Wang patent. All of the involved claims required amplifying a target nucleic acid sequence and a control (or standard) nucleic acid sequence using the same primers (Opinion 2-3). Judgment was entered in Interference 105,055 because Appellants' involved claims were determined to be unpatentable under 35 U.S.C. § 135(b) (see Final

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understood that all of the claims were included in the rejections (Appeal Br. 12). Since we are reversing the rejections on appeal, any error in the Answer is harmless.

[3] Mullis et al., US 4,683,195, issued July 28, 1987.

Judgment, Apr. 5, 2004, included in the Related Proceedings Appendix to the Appeal Brief).

In reaching that determination, the Board concluded that one of the material limitations of Wang's claims was "use of a shared primer pair for amplifying the control and target sequences" (Opinion 5). The Board determined that this limitation was not a part of the claims that had been filed by Appellants, or were pending, within one year of the issue date of the Wang patent (id. at 13-23) and therefore "none of the earlier Murakawa claims, i.e., Murakawa claims filed or pending as of June 15, 1994 . . . , are directed to the same or substantially the same invention as claimed in the Wang 1993 patent because . . . none require or necessarily result in use of shared primer pairs" (id. at 22-23).

All of the claims on appeal recite that the target sequence and reference sequence "can be amplified by the same or different oligonucleotides" (see independent claims 190, 199, 208, 217, and 249-255). Since the claims on appeal expressly do not require or necessarily result in use of shared primer pairs to amplify the target and reference nucleic acid sequences, they are not directed to the same or substantially the same invention as that claimed by Wang. See Corbett v. Chisholm, 568 F.2d 759, 766 (CCPA 1977) ("There being a material limitation of the copied claim not present in Corbett's claims 24-27, they cannot be said to be directed to substantially the same invention.").

II.

Under the provisions of 37 C.F.R. § 41.50(b), we enter the following grounds of rejection:

(1) Claims 190, 199, 208, 217, and 249-255 are rejected because Appellants are estopped from claiming subject matter that is not patentably distinct from the count in Interference 105,055. See In re Deckler, 977 F.2d 1449 (Fed. Cir. 1992), and In re Kroekel, 803 F.2d 705 (Fed. Cir. 1986).

(2) Claims 190, 199, 208, 217, and 249-255 are also rejected based on estoppel under 37 C.F.R. § 1.658(c).[4]

1. Estoppel based on In re Deckler and In re Kroekel

Findings of Fact

1. Interference 105,055 involved U.S. Patent 5,219,727 (Wang) and the application now on appeal (Interference 105,055, Declaration of Interference, Apr. 28, 2003, pages 3-4).[5]

2. Count 1 in Interference 105,055 was "Wang (5,219,727) claim 1 . . . or Murakawa (07/402,450) claims 34, 35, 44, 46 or 47" (Declaration of Interference, page 5).

3. Claim 1 of Wang '727 reads as follows:

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[4] The interference rules in effect at the time of Interference 105,055 were set out at 37 C.F.R. §§ 1.601-1.690. Therefore, those rules defined Appellants' obligations during the interference and the estoppel effect of the interference decision. To the extent they are relevant, however, the rules currently in effect define substantially the same obligations and estoppel. See 37 C.F.R. § 41.127(a)(1).

[5] A copy of the Declaration of Interference (Apr. 28, 2003) is attached to this opinion.

A method for quantifying a target nucleic acid segment in a sample, which method comprises the steps of:

(a) adding to said sample a predetermined initial amount of standard nucleic acid segment wherein said standard nucleic acid segment binds to same primers as are bound by said target nucleic acid segment in a reaction mixture;

(b) treating said sample under conditions suitable for carrying out a polymerase chain reaction, wherein said nucleic acids are rendered single-stranded and exposed to an agent for polymerization, deoxynucleoside 5' triphosphates, and a pair of oligonucleotide primers, wherein said pair of primers is specific for both the target and standard nucleic acid segments, such that an extension product of each primer of said pair can be synthesized using separate strands of the target and standard segments as a template for synthesis, such that the extension product of one primer, when it is separated from the template strand, can serve as a template for the synthesis of the extension product of the other primer of said pair wherein said amplified target and standard segments are distinguishable by size or by the use of internal probes, wherein said internal probes may be differentially labeled for each of said amplified target and standard segments;

(c) separating the primer extension product from the templates on which they were synthesized to form single-stranded molecules;

(d) repeating steps (b) and (c) on the single stranded molecules produced in step (c) at least once, whereby each repeat of steps (b) and (c) is one amplification cycle;

(e) measuring the amounts of the amplified target and standard segments produced in step (d); and

(f) calculating from the amplified target and standard segments produced in step (d) the amount of said target nucleic acid segment present in the sample before amplification.

(Wang '727, col. 18, ll. 17-58.)

4. At the time of Interference 105,055, claim 34 of the instant application read as follows:

> An amplification reaction mixture for the quantitation of a target viral RNA segment in a biological sample, said reaction mixture comprising:
>
> said target viral RNA;
>
> a predetermined initial amount of a control sequence for quantitation of a target viral RNA, wherein said control sequence and its complementary sequence bind the same primers as are bound by said target viral RNA segment and its complementary sequence; and
>
> an oligonucleotide primer pair wherein said primer pair can serve to amplify said control sequence and said target viral RNA, wherein following amplification said control sequence and amplified target segments are distinguishable by size.

(Amendment filed April 4, 2001, page 2.)

5. At the time of Interference 105,055, claim 35 of the instant application read as follows:

> A reverse transcription reaction mixture for reverse transcribing a target viral mRNA suspected of being present in a biological sample, said reaction mixture comprising a predetermined initial amount of a control sequence cRNA, a target viral RNA, and a target-specific primer for initiating cDNA synthesis, wherein said primer can serve to initiate reverse transcription of a nucleic acid segment contained within said control sequence cRNA together with a segment contained within the particular target viral RNA, and wherein said control sequence is further distinguished by having a hybridization site identical in sequence to a hybridization site in said target viral RNA, whereby following reverse transcription the resulting target and control sequence cDNAs can serve as templates for amplification for providing control sequence and target amplified viral RNA segments which are distinguishable by size.

(Amendment filed April 26, 2001, page 2.)

6. At the time of Interference 105,055, claim 46 of the instant application read as follows:

> An amplification reaction mixture for the quantitation of a target viral RNA segment in a biological sample, said reaction mixture comprising:
>
> said target viral RNA;
>
> a predetermined initial amount of a control sequence for quantitation of a target viral RNA, wherein said control sequence binds the same primers as are bound by said target viral RNA segment; and
>
> an oligonucleotide primer pair wherein said primer pair can serve to amplify said control sequence and said target viral RNA, wherein following amplification said control sequence and target amplified viral RNA segments are distinguishable by size or by the use of internal hybridization probes.

(Amendment filed April 4, 2001, page 3.)

7. At the time of Interference 105,055, claim 47 of the instant application read as follows:

> A reverse transcription reaction mixture for reverse transcribing a target viral mRNA suspected of being present in a biological sample, said reaction mixture comprising a predetermined initial amount of a control sequence cRNA, a target viral RNA, and a target-specific primer for initiating cDNA synthesis, wherein said primer can serve to initiate reverse transcription of a nucleic acid segment contained within said control sequence cRNA together with a segment contained within the particular target viral RNA, and wherein said control sequence is further distinguished by having a hybridization site identical in sequence to a hybridization site in said target viral RNA, whereby following reverse transcription the resulting target and control sequence cDNAs can serve as templates for amplification for providing control sequence and target

> amplified viral RNA segments which are distinguishable by size or by use of internal hybridization probes.

(Amendment filed April 26, 2001, page 2.)

8. During the interference, Appellants did not request to move to add newly rejected claims 190, 199, 208, 217, and 249-255 to their application.

9. The Board entered judgment after concluding that "Murakawa claims 34-35, 38-39, 42-44 and 46-47, are unpatentable under § 135(b)(1)" (Final Judgment, Apr. 5, 2004, included in the Related Proceedings Appendix to the Appeal Brief, page 2).

10. As a result, the Board's Final Judgment stated, in relevant part:

> it is
>
> ORDERED that judgment on priority as to Count[ ] 1 . . . is awarded against senior party GEORGE J. MURAKAWA [et al.].
>
> FURTHER ORDERED that senior party GEORGE J. MURAKAWA [et al.] is not entitled to a patent containing
>
> (i) claims 34-35, 38-39, 42-44 and 46-47 (corresponding to Count 1) . . .
>
> of application 07/402,450.

(Final Judgment, page 3.)

Principles of Law

"The doctrine of interference estoppel is directed to finality of an interference, at least with respect to all issues which might have been presented in the interference." In re Kroekel, 803 F.2d 705, 709 (Fed. Cir. 1986).

The Kroekel court held that Kroekel's claim on appeal "d[id] not exclude the precise subject matter lost in the interference. To allow Kroekel

that claim, via Rule 131 affidavits or otherwise, would be to permit an undeserving Kroekel to circumvent the adverse priority determination in the interference at the expense of the winning party." Id. at 710.

Thus, the court "has applied interference estoppel to bar the assertion of claims for inventions that are patentably indistinct from those in an interference that the applicant had lost." In re Deckler, 977 F.2d 1449, 1452 (Fed. Cir. 1992).

The Deckler court concluded that

> [t]he interference judgment conclusively determined that, as between Deckler and Grataloup, Grataloup was entitled to claim the patentable subject matter defined in the interference count. It is therefore proper, and consistent with the policies of finality and repose embodied in the doctrines of res judicata and collateral estoppel, to use that judgment as a basis for rejection of claims to the same patentable invention.

Id.

Analysis

Each of the independent claims on appeal is directed to subject matter that is not patentably distinct from Count 1 in Interference 105,055, which encompassed a method of quantifying a nucleic acid segment in a sample (Wang, claim 1), a reaction mixture for quantitation of a target viral RNA segment in a sample (claims 34 and 46 of the instant application) and a reaction mixture for reverse transcribing a viral RNA in a sample (claims 35 and 47 of the instant application). Because Count 1 in Interference 105,055 encompassed all of these claims, the limitation of the claims on appeal to a target that is a viral RNA does not patentably distinguish them from the interference count.

Claim 190 encompasses the method of Wang's claim 1 but is broader in two senses: claim 190 allows amplification of the target and control RNA sequences using the same or different primers, and claim 190 does not include a quantitation step. Claim 249 is the same as claim 190 except that it includes a quantitation step.

Claim 208 is the same as claim 190 except that it omits the step of "selecting a sequence present in the target viral RNA." Claim 251 is the same as claim 208 except that it adds a quantitation step at the end.

Claim 199 defines a process of using the reaction mixture defined by claim 35 of the instant application to reverse transcribe and amplify a viral RNA and control RNA where, again, the primers used for the target and control RNAs can be the same or different. Claim 250 is the same as claim 199 except that it adds a quantitation step at the end; the count in the interference (Wang, claim 1) also included quantitating a nucleic acid.

Claim 217 is the same as claim 199 except that it omits the step of "selecting a sequence present in the target viral RNA." Claim 252 is the same as claim 217 except that it adds a quantitation step at the end.

Claims 253 and 254 are substantively identical to claims 46 and 47, respectively, of the instant application, except that the claims on appeal are broader in that they are open to amplifying or reverse transcribing the target and control sequences using either the same or different primers. The claims on appeal also state that the control sequence "comprises a sequence present in the target viral RNA sequence and a sequence not present in the target viral RNA sequence" but those limitations are inherently present in claims 46 and 47, which require the target and control sequences to be amplified or

reverse transcribed by the same primers (meaning they include some of the same sequence) and that they be distinguishable by size or internal probes (meaning they include some sequence that differs from each other).

Claim 255 is directed to a kit that is identical to the reaction mixture of claim 253 except that it does not require a target viral RNA sequence to be included.

Thus, the independent claims on appeal differ from the subject matter of Count 1 of Interference 105,055 in only the following ways:

– they allow the use of primers that are the same or different, while the count required using the same primers;

– they do not require the quantitation step that is recited in Wang's claim; and/or

–they are directed to a method of using the product of the count for the very purpose recited in the preambles of the claims that were designated as the count.

The first two of these differences make the claims on appeal broader than the interference count but do not exclude the subject matter of the count. The last difference is an obvious use of the product of the interference count because it is the intended use of the product, which is expressed in the product claims themselves.

Thus, the claims on appeal are directed to subject matter that includes the subject matter of the count in Interference 105,055 or is not patentably distinct from the subject matter of the count. Interference 105,055 held that Appellants were not entitled a patent to that subject matter. Cf. In re Kroekel, 803 F.2d at 710 (Kroekel's claim on appeal "d[id] not exclude the

precise subject matter lost in the interference. To allow Kroekel that claim . . . would be to permit an undeserving Kroekel to circumvent the adverse priority determination in the interference at the expense of the winning party."); In re Deckler, 977 F.2d at 1452 (court "has applied interference estoppel to bar the assertion of claims for inventions that are patentably indistinct from those in an interference that the applicant had lost").

Appellants are therefore estopped by the outcome of the interference from claiming the subject matter of instant claims 190, 199, 208, 217, and 249-255.

2. Estoppel based on 37 C.F.R. § 1.658(c)

Principles of Law

> A judgment in an interference settles all issues which (1) were raised and decided in the interference, (2) could have been properly raised and decided in the interference by a motion under § 1.633 (a) through (d) and (f) through (j) or § 1.634, and (3) could have been properly raised and decided in an additional interference with a motion under § 1.633(e). A losing party who could have properly moved, but failed to move, under § 1.633 or 1.634, shall be estopped to take ex parte or inter partes action in the Patent and Trademark Office after the interference which is inconsistent with that party's failure to properly move, except that a losing party shall not be estopped with respect to any claims which correspond, or properly could have corresponded, to a count as to which that party was awarded a favorable judgment.

37 CFR § 1.658(c).

> A party may file the following preliminary motions: . . . (c) A motion to redefine the interfering subject matter by (1) adding or substituting a count, (2) amending an application claim corresponding to a count or adding a claim in the moving

> party's application to be designated to correspond to a count, [or] (3) designating an application or patent claim to correspond to a count.

37 CFR § 1.633.

Analysis

As discussed above, the claims presently on appeal differ from those involved in Interference 105,055 mainly in being open to using either the same or different primers to amplify or reverse transcribe the target and control nucleic acids.

After Wang filed its motion in the interference to have Appellants' claims held unpatentable under 35 U.S.C. § 135(b), Appellants could have sought authorization to file a motion to add newly rejected claims 190, 199, 208, 217, and 249-255 to avoid the bar of § 135(b). A "judgment in an interference settles all issues which (1) were raised and decided in the interference, [or] (2) could have been properly raised and decided in the interference by a motion under § 1.633 (a) through (d) and (f)." 37 CFR § 1.658(c).[6]

Because Appellants could have moved to add newly rejected claims 190, 199, 208, 217, and 249-255 to their application during Interference 105,055 but failed to do so, they are "estopped to take ex parte or inter partes action in the Patent and Trademark Office after the interference which is inconsistent with [their] failure to properly move." 37 C.F.R. § 1.658(c). Appellants are estopped from claiming the subject matter of claims 190, 199,

[6] The exception set out in the rule does not apply here because Appellants were not awarded a favorable judgment on any count in the interference.

208, 217, and 249-255 because that action is inconsistent with their failure to move to put that subject matter in issue during the interference.

SUMMARY

We reverse the rejection based on 35 U.S.C. § 135(b)(1). We enter two new grounds of rejection based on estoppel arising out of Interference 105,055.

Although we have only applied the new grounds of rejection to the independent claims, if prosecution in the application is continued, the Examiner should consider whether the dependent claims are patentably indistinct from the count in Interference 105,055 or whether Appellants also could have moved to add the dependent claims during the interference. If so, the Examiner should apply the appropriate rejection(s) for interference estoppel to those claims as well.

TIME PERIOD FOR RESPONSE

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

> (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating

to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

REVERSED, 37 C.F.R. § 41.50(b)

alw

UNITED STATES PATENT AND TRADEMARK OFFICE

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES
BOX INTERFERENCE, WASHINGTON, D.C. 20231

Filed by: Judge Carol A. Spiegel
Telephone: (703) 308-9797
Facsimile: (703) 305-0942

Applicants: MURAKAWA
Application No.: 07/402,450
Filed: 09/01/89
For: METHOD FOR AMPLIFICATION AND DETECTION OF RNA SEQUENCES
Accorded benefit: Application Nos. 07/143,045, filed 01/12/88; 07/148,959, filed 01/27/88

The above-identified application or patent has been forwarded to the Board of Patent Appeals and Interferences because it is adjudged to interfere with another application or patent. An interference has been declared. The interference is designated as No. 105,055.

Notice is hereby given the parties of the requirement of the law for filing in the Patent and Trademark Office a copy of any agreement "in connection with or in contemplation of the termination of the interference." 35 U.S.C. § 135(c).

Carol A. Spiegel

CAROL A. SPIEGEL
Administrative Patent Judge

Paper 1

By: Carol A. Spiegel
Administrative Patent Judge
Box Interference
Washington, DC 20231
Tel: 703-308-9797
Fax: 703-305-0942

Filed: April 28, 2003

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Carol A. Spiegel)

ALICE M. WANG, MICHAEL E. DOYLE
and DAVID F. MARK

Junior Party,
U.S. Patent 5,219,727
U.S. Patent 5,476,774

v.

GEORGE J. MURAKAWA, R. BRUCE WALLACE,
JOHN A. ZAIA and JOHN J. ROSSI

Senior Party,
Application 07/402,450

Patent Interference No. 105,055

Part A. Declaration of interference

An interference is declared (35 U.S.C. §135(a)) between the above-identified parties.

Details of the application(s), patent (if any), reissue application (if any), count(s) and claims designated as corresponding or not corresponding to the count(s) appear in Parts E and F of this NOTICE DECLARING INTERFERENCE.

Part B. Judge designated to handle the interference

Administrative Patent Judge Carol A. Spiegel has been designated to handle the interference. 37 CFR § 1.601(a).

Part C. Standing order

A Trial Section STANDING ORDER accompanies this NOTICE DECLARING INTERFERENCE. The STANDING ORDER applies to this interference.

Part D. Conference call to set dates

A telephone call to set dates for taking action in the interference is scheduled for **2:00 p.m. on June 23, 2003** (the call will be initiated from the PTO).

No later than **two business days** prior to the conference, each party shall file and serve by facsimile a list of the preliminary motions the party intends to file. See § 17 of the STANDING ORDER.

A copy of a "sample" order setting times for taking action during the preliminary motion phase of the interference accompanies this NOTICE DECLARING INTERFERENCE.

Counsel are encouraged to discuss the order prior to the conference call with the view to coming to some mutual agreement as to dates for taking action. A typical preliminary motion period lasts approximately nine (9) months. Counsel should be prepared to justify any request for a shorter or longer period.

The parties were also invited to consider participation in a voluntary electronic filing pilot project. A sample order setting procedures for electronic transmittal of papers is attached (see http://www.uspto.gov/web/offices/dcom/bpai/its.htm, University of New Mexico v. Fordham University, Interference No. 104,671, Paper 21).

Part E. The parties involved in this interference are:

Junior party

Named inventor:	ALICE M. WANG, Walnut Creek, California MICHAEL D. DOYLE, Oakland, California DAVID F. MARK, Plainsboro, New Jersey
Patent:	U.S. Patent 5,219,727, issued June 15, 1993, based on U.S. application 07/413,623, filed September 28, 1989
Title:	Quantitation of Nucleic Acids Using the Polymerase Chain Reaction
Assignee:	HOFFMAN-LA ROCHE INC.
Accorded benefit:	U.S. application 07/396,986, filed August 21, 1989

Patent:	U.S. Patent 5,476,774, issued December 19, 1995, based on U.S. application 08/028,464, filed March 9, 1993
Title:	Quantitation of Nucleic Acids Using the Polymerase Chain Reaction
Assignee:	HOFFMANN-LA ROCHE INC.
Accorded benefit:	U.S. application 07/413,623, filed September 28, 1989, now U.S. Patent 5,219,727, issued June 15, 1993 U.S. application 07/396,986, filed August 21, 1989
Attorneys:	See last page
Address:	See last page

Senior party

Named inventors:	GEORGE J. MURAKAWA, Cypress, California R. BRUCE WALLACE, South Pasadena, California JOHN A. ZAIA, Arcadia, California JOHN J. ROSSI, Glendora, California
Application:	U.S. application 07/402,450, filed September 1, 1989
Title:	Method for Amplification and Detection of RNA Sequences
Assignee:	CITY OF HOPE
Accorded benefit:	U.S. application 07/143,045, filed January 12, 1988 U.S. application 07/148,959, filed January 27, 1988
Attorneys:	See last page
Address:	See last page

Part F. Counts and claims of the parties:

Count 1

Wang (5,219,727) claim 1 or Wang (5,476,774) claims 5, 15 or 17 or Murakawa (07/402,450) claims 34, 35, 44, 46 or 47.

Count 2

Wang (5,476,774) claim 1 or Murakawa (07/402,450) claim 45.

The claims of the parties are:

Wang (5,219,727)	1-10
Wang (5,476,774)	1-18
Murakawa (07/402,450)	34-35, 38-39, 42-47

The claims of the parties which correspond to Count 1 are:

Wang (5,219,727)	1-4, 6-10
Wang (5,476,774)	5-7, 10-12, 15-18
Murakawa (07/402,450)	34-35, 38-39, 42-44, 46-47

The claims of the parties which correspond to Count 2 are:

Wang (5,219,727)	none
Wang (5,476,774)	1-3, 8-9
Murakawa (07/402,450)	45

The claims of the parties which do not correspond to either Count 1 or Count 2, and therefore are not involved in the interference, are:

Wang (5,219,727)	5
Wang (5,476,774)	4,13-14
Murakawa (07/402,450)	none

Part G. Heading to be used on papers

The following heading shall be used on papers filed in the interference. See § 18 of the STANDING ORDER.

_____ Paper ___[1]

Filed on behalf of [name of party]
By: Name of lead counsel, Esq.
Name of backup counsel, Esq.
Street address
City, State and Zip-Code
Tel:
Fax:

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Carol A. Spiegel)

ALICE M. WANG, MICHAEL E. DOYLE
and DAVID F. MARK

Junior Party,
U.S. Patent 5,219,727
U.S. Patent 5,476,774

v.

GEORGE J. MURAKAWA, R. BRUCE WALLACE,
JOHN A. ZAIA and JOHN J. ROSSI

Senior Party,
Application 07/402,450

Patent Interference No. 105,055

TITLE OF PAPER

[1] Leave a blank line because the Board assigns the paper number.

Part H. Summary of dates for taking action

Times for taking action are set out in the following sections of the STANDING ORDER:

1. **§ 7:** date for identifying lead and backup counsel.

2. **§ 8:** date for identifying any real party in interest.

3. **§ 9:** date for requesting copies of involved and benefit applications and patents.

4. **§ 17:** date for filing list of proposed preliminary motions.

5. **§ 19:** date for accomplishing certain discovery.

6. **§ 20:** date for filing clean copy of claims.

7. **§ 21:** date for filing clean copy of claims in cases with drawings and/or claims containing a means plus function limitation.

8. **§ 23:** dates for filing oppositions to Rule 635 miscellaneous motions and dates for filing replies to oppositions.

9. **§ 33:** date for objecting to admissibility of evidence.

10. **§ 34:** date for serving supplemental affidavits or evidence to respond to objection to admissibility of evidence.

11. **§ 35:** dates when cross-examination can take place.

12. **§ 45:** dates for taking action with respect to settlement discussions.

Part I. Order form for requesting file copies

FILE COPY REQUEST

Interference 105,055 (CAS)

A copy of Part E of this NOTICE DECLARING INTERFERENCE should be attached to this FILE COPY REQUEST, with a circle by hand around the patents and applications for which a copy of a file wrapper is desired.

To facilitate processing of this FILE COPY REQUEST, the following information should be included:

1. Charge fees to USPTO Deposit Account No. _____

2. Complete address, including street, city, state, zip code and telephone number (do not list a Post Office box inasmuch as file copies are sent via commercial overnight courier).

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Part J. Signature of administrative patent judge

Carol A. Spiegel
CAROL A. SPIEGEL
Administrative Patent Judge

Date: April 28, 2003
Arlington, VA

Enc:

Copy of STANDING ORDER

Copy of order used for setting times for taking action in the preliminary motion phase of the interference (ORDERPM6)

Copy of order used for setting times for taking action in the testimony and briefing phases of the interference (ORDERTE6)

Copy of U.S. Patent 5,219,727

Copy of U.S. Patent 5,476,774

Copy of claims of application 007/402,450

Copy of sample order setting procedures for electronic transmittal of papers

cc (via overnight mail):

Attorney for Wang
(real party in interest
HOFFMANN-LA ROCHE INC.):

Stacy R. Sias
ROCHE MOLECULAR SYSTEMS INC.
Patent Law Department
1145 Atlantic Avenue
Alameda, CA 94501
Tel: 510-814-2972
Fax: 510-814-2973

Attorney for Murakawa
(real party in interest
CITY OF HOPE):

E. Anthony Figg, Esq.
ROTHWELL, FIGG, ERNST & MANBECK
1425 K Street, N.W.
Suite 800
Washington, D.C. 20005
Tel: 202-783-6040
Fax: 202-783-6031